

Curriculum Vitae (CV)

PARTHA PRATIM GOGOI

Email: pg15@iitbbs.ac.in / p2gogoi@gmail.com

Phone: +91-8658333501 / +91-9706382436

Nationality: Indian

Corresponding Address

C/O-Amrit Gogoi

Kalyanpur, Biswanath Chariali,

Ward-11, Pin-784176

Assam, India

Academics

Ph.D. (pursuing) to be submitted soon

July, 2016 - present

School of Earth, Ocean and Climate Sciences,

Indian Institute of Technology Bhubaneswar (IIT BBS)

Thesis Title: Regional Climate Change over India: A Land-Atmosphere Interactions Perspective (Observational and Modeling Approach)

M.Sc. (Atmosphere and Ocean Sciences)

2014-2016

School of Earth, Ocean and Climate Sciences,

Indian Institute of Technology Bhubaneswar (IIT BBS)

M.Sc. (Geology)

2011-2013

Department of Geological Sciences,

Gauhati University

B.Sc. (Geology-H, Physics, Math)

2008-2011

Department of Geology,

Cotton College,

Gauhati University

Higher Secondary (12th)

2008

Assam Higher Secondary Education Council (AHSEC)

Govt. of Assam

Physics, Chemistry, Math, English, Assamese

Matriculation (10th)

2006

Secondary Education Board of Assam (SEBA)

Govt. of Assam

Honors/ Awards

- Qualified **Joint Admission Test for Masters (JAM), 2014** conducted by the Indian Institute of Technology (IIT) s (MHRD-Ministry of Human Resource Development, Govt., of India). Selected for Joint M.Sc.-Ph.D. programme in Atmosphere and Ocean Sciences at IIT Bhubaneswar. It is conducted in All-India basis every year.
- Qualified **CSIR/UGC-NET (Lectureship), 2018 (June)** in Earth, Atmospheric, Ocean and Planetary Sciences. It is conducted in All-India basis every 6 months. This certificate makes a candidate eligible to apply for Assistant Professor Positions in Indian Universities/Colleges.
- **Anandaram Barooah Award, 2006 (Govt. of Assam, India)**. This award is given to all successful 1st division holders of Matriculation Examination from Assam (SEBA). This award comprises of a Desktop Computer and a certificate.

Experience/Workshop

- Student internship at National Institute of Ocean Technology (NIOT), Chennai, India-2014.
- Training course on Ocean Data Utilization and Ocean Observation Systems at INCOIS, Hyderabad (India)-2014.
- Lab work carried out for a semester at India Meteorological Department (IMD), Bhubaneswar-2014.
- Laboratory work for a semester at Odisha Space Application and Centre (ORSAC), Bhubaneswar-2015.
- 1 (one) week workshop on “Geo-informatics in Geology” at Gauhati University-2016.
- GIAN course on “Climate Change: Science, Impact and Adaptation” during 01-08 December 2016 at IIT Bhubaneswar (National Workshop).
- GIAN course on "Extreme Weather Events over India: Observations, Assimilation and Modelling with special focus on Tropical Cyclones” during 18-25 June 2018 at IIT Bhubaneswar (National Workshop).
- Basic Training on Arc-GIS and its application on RMT organized by Geological Survey of India during 4th Nov to 15th Nov, 2019.

Teaching Experience

Have been assisting as a teaching assistant for undergraduate and graduate students in the following:

- Modeling and Visualization Laboratory for Masters’ Student.
- Weather Analysis and Forecasting Laboratory for Masters’ Student.
- Environmental Science, Technology and Management for Undergraduate Students.

Research Experience

School of Earth, Ocean and Climate Sciences, IIT Bhubaneswar

Junior Research Fellow (JRF)	2016-2018
Senior Research Fellow (SRF)	2018-present (4 years)

Research Interests

I am involved in understanding the land surface change dynamics and its impact on the changing climate. The land- atmosphere feedback mechanism interests me. The complex state of physical and dynamical equations that holds the atmosphere and the land makes the climate system a puzzle. However, numerical modeling approximations and remote sensing techniques have reduced these uncertainties to a significant extent. Still the question of long term climate change and its responses to local as well as global phenomena are yet to be answered. My research topic emphasizes in understanding how changes in the land surface characteristics impact the regional climate system using observation, satellite remote sensing and numerical modeling approximations.

Currently, I am working as a Senior Research Fellow at the School of Earth, Ocean and Climate Sciences, IIT BBS under the guidance of Dr. Vinoj V. Apart from the above mentioned interests, we are also enthusiastically working on understanding the link between the extreme rainfall events and the flash floods of North Eastern India. Whether the extreme rainfall is a result of the land-atmosphere feedback or a contribution from advection is yet to be answered with proper quantification.

Keywords: Urban Climate Change, Land-Atmosphere Feedback, LULC Change Impacts, Remote Sensing, Numerical Mesoscale Modeling.

Technical Skills

- **Operating system:** Linux, Windows.
- **Visualization software:** MATLAB, GrADS, ArcGIS, SNAP, Erdas Imagine.
- **Modeling tools:** Weather Research and Forecasting (WRF-LSM) Model, SBDART, SWAT (beginner).

Publications

Journal Articles

1. **P. P. Gogoi**, V. Vinoj, D. Swain, J. Dash, G. J. Roberts and S. Tripathy (2019), Land use and Land cover change effect on surface temperature over Eastern India, Scientific Reports, 9, DOI: <https://www.nature.com/articles/s41598-019-45213-z>. 9000 + downloads till date.

2. **P.P. Gogoi**, V. Vinoj, P. Phukon (2020), A study of the role of meteorology and local orography on the flood of Lower Subansiri Basin and the post-flood changes to land use land cover (LULC), Current Science, Vol. 118 (5). <https://www.currentscience.ac.in/Volumes/118/05/0778.pdf>
3. T. Mukherjee, A. Asutosh, S. K. Pandey, L. Yang, **P. P. Gogoi**, A. Panwar and V. Vinoj (2018), Increasing Potential for Air Pollution over Megacity New Delhi: A Study Based on 2016 Diwali Episode, AAQR, DOI: 10.4209/aaqr.2017.11.0440.
4. U. Dutta, **P. P. Gogoi**, P. P. Sengupta and P. Phukon (2018), Time Series Analysis of Temperature and Rainfall in the Brahmaputra Basin, Assam, Urban India, Vol. 38 (II). <https://www.niua.org/urban-india/urban-india-2018-jul-dec>
5. T. Zore, K. Landu, **P.P. Gogoi**, Vinoj V., (2020), Effect of Tropical Sub-seasonal Variability on Heat Waves over India, International Journal of Climatology. <https://doi.org/10.1002/joc.6844>

Book Chapter

- 1) Ujjal Protim Dutta, Hemant Gupta and **Partha Pratim Gogoi**, Statistical Analysis of climate variables in Two ground Based Meteorological Stations of Assam(India), *Sustainable Development and Environmental Governance* (Editors: Partha Sarathi Sengupta and Bhupal Bhattacharya). ISBN: 978-81-8435-472-0

Conference Presentations

1. **P. P. Gogoi** and Vinoj V, Signature of LULC induced Regional Climate Change over Eastern India: A Modeling and Observational Approach, EGU General Assembly 2020, Virtual Conference, May 2020.
2. **P.P. Gogoi** and Vinoj V, Urbanization Induced Temperature Rise over Eastern India: A Primary Appraisal to Estimate Urban Climate Change, Symposium on Challenges in Applied Human Biometeorology, University of Freiburg, Germany, 2nd-3rd March, 2020.
3. V. Vinoj and **P.P. Gogoi**, Quantifying the Effect of LULC on Surface Temperature over the Indian Region, 100th American Meteorological Society Annual Meeting, Boston, USA, 12th -16th January, 2020.
4. V. Vinoj and **P. P. Gogoi**, How much has LULC contributed to the warming over Eastern Indian region? TROPMET 2019, Andhra University, Visakhapatnam, India.
5. **P.P. Gogoi** and Vinoj V., Footprint of Urban Climate Change over Eastern India, National Conference on Green, Sustainable and Evolving Sciences (GSES-2019) & 64th Annual Technical Session of Assam Science Society, Cotton University, Guwahati-1, 28-29th June, 2019. **[Invited talk]**.
6. **P.P. Gogoi**, P. Phukon, V. Vinoj, 2018, Long term methodical evaluation of rainfall datasets over Brahmaputra basin: a preliminary appraisal, ISRS and ISG, NESAC, Shillong. **[Awarded 2nd best prize for oral presentation]**.
7. **P. P. Gogoi**, Lekshmi. K, J. Dash, Roberts. G. J, D. Swain and V. Vinoj, 2016, Temperature changes associated with Urbanization over Eastern India, TROPMET 2016, Indian Meteorological Society, Bhubaneswar.

8. **P. P. Gogoi**, Lekshmi. K, D. Swain and V. Vinoj, 2016, Temperature changes associated with Urbanization or Land Use Land Cover Change over the state of Odisha, 7th March, 2016, First International Conference on Climate Science, Cotton College, Guwahati, INDIA. [**Awarded: Best Poster Prize**].
9. **P.P. Gogoi** and P. Phukon, 2013, Flood Hazard and Erosion Vulnerability in Lower Dikrang Basin, North Brahmaputra Plain, Assam, IGU and NESAC, Shillong, pp47.
10. Zore Tukaram, **P. P. Gogoi**, V. Vinoj, K. Landu Effect of convectively coupled equatorial waves on daytime temperature distribution over India. National Symposium TROPMET 2018, Organized by Indian Meteorological Society on “Understanding Weather and Climate Variability: Research for Society”, Banaras, India, October, 2018.

References

Dr. Vinoj V. (Ph.D. Supervisor)
Assistant Professor
School of Earth, Ocean and Climate Sciences
IIT Bhubaneswar
Email: vinoj@iitbbs.ac.in

Dr. Sourav Sil
Assistant Professor
School of Earth, Ocean and Climate Sciences
IIT Bhubaneswar
Email: souravsil@iitbbs.ac.in

Prof. Parag Phukon
Professor
Department of Geological Sciences
Gauhati University
Email: p_phukon@rediffmail.com / pp016@gauhati.ac.in

The information given above are true and correct to the best of my knowledge.

Partha Pratim Gogoi

Partha Pratim Gogoi